

Error Codes

Code	Fault	Cause & Remedy
00	1 Hour Continuous Use (Hot water operating for 1 hour non-stop)	HOT WATER RUNNING FOR 1 HOUR Close all hot water taps Check for leaks, open/dropping tap on hot water system Turn off, or remove circulation pumps Applicable to specific models only
10	Pre-Error (Pre-error Air Supply or Exhaust Blockage)	ISSUE IN COMBUSTION SYSTEM OF UNIT (AIR/GAS INSTAKE or EXHAUST) Check all vent components for connections. Full service required, Reset Unit Clean unit and tap filters Check that nothing is obstructing flue/exhaust (no obstruction within 1.5m) Check gas installation, supply and pressure correct. Reset Unit Ensure/clean heat exchanger fins, fan and air intake. Reset Unit
11	Unit failed to Ignite (Issue with Gas Supply to unit)	INCORRECT GAS SUPPLY TO UNIT Ensure correct gas pressure and volume (check cylinder full valves open) Ensure gas type and pressure is correct/stable - test static and operating (2+ hot taps) Check Regulator for any oil residue, test for regulator creep ** Bleed any air from gas lines Ensure gas line, meter and regulator are sized properly Check gas solinoid valves for open or short circuits. Check all connections Ensure ignitor is operational. listen for ticking at ignition box Check ignitor wiring harness, check all connections to PC board.
12	Flame Extinguished (Issue with Gas Supply to unit)	INCORRECT GAS SUPPLY TO UNIT Ensure correct gas volume and pressure to unit (check cylinder full valves open) Ensure gas type and pressure is correct/stable - test static and operating (2+ hot taps) Bleed all air from gas lines Ensure flame rod wires are connected, check flame rods for carbon build-up Ensure gas line, meter and regulator are sized properly Check Regulator for any oil residue, test for regulator creep ** Check power supply and ignitor for loose connections Ensure proper venting material was installed (Internal Units) Ensure maximum vertical vent length does not exceed allowable units (Internal Units) Ensure maximum horizontal vent length does not exceed limits (Internal Units) Check water flow in and out of unit is sufficient
14	Heat Exchanger Protection (Overheat Protection Sensor tripped)	OHM OUT SAFETY CIRCUIT - (OVER HEAT LIMITER) EXCESSIVE heat build-up in heat exchanger due to blockage; CAUSE=BOREHOLE WATER (lime-scale build up.) Ensure high and low gas pressures are correct Check gas type of unit and ensure it matches gas type being used Check heat exchanger for cracks, separations or discolouration Check for improper concersion of product Check for restriction in air flow around unit and vent terminal Check for foreign materials in combustion chamber and/or exhaust piping Replace OHM Wrap Protection Sensor, full flush of heat exchanger required.

Error Codes

Code	Fault	Cause & Remedy
15	Boiling Safety Device (High HOT water Temperature produced)	WATER SUPPLY ISSUE TO UNIT - RESTRICTION, AIR INGRESS OR BLOCKAGE Check for closed cold water inlet valve or restrictions in cold water inlet pipe Check for clogged heat exchanger (lime-scale build-up) On commercial water heaters, lower set point temperature below 82 Celsius Borehole water use, full flush of heat exchanger required, Reset unit
51	Gas Inlet Solenoid Fault (Proportional Gas Valve malfunction)	PROPORTIONAL GAS SOLENOID VALVE ISSUE (GAS SECTION) Check gas inlet solenoid valve wiring harness for loose or damaged terminals Check for oil residue, foreign particles or sand in GAS diaphragm Check High and Low gas pressure settings correct Check for any blockages in gas supply Replace proportional Gas Solenoid Valve
52	Gas Modulating Solenoid Fault (Proportional Gas Valve malfunction)	PORTIONAL GAS SOLENOID VALVE ISSUE (GAS SECTION) Check modulating gas solenoid valve wiring harness for loose or damaged terminals Disassemble and clean proportional valve and gas diaphragm Reset Unit Check gas pressures Replace Proportional Gas Solenoid Valve
76	Communication Fault with Remote Controller (Remote not registering with unit)	CONTROLLER NOT SYNCING WITH UNIT Check remote control wiring for loose or damaged connections Bypass remote control cable Replace cable if found to be faulty Replace controller Replace PCB
79	Fan Motor Fault (Abnormal fan speed)	FAN SPEED OUTSIDE OF SET-PARAMETERS Ensure Fan spinning freely Check gas pressures Check Fan motor Voltage Replace PCB or Fan
99	Gas Type Data Failure (PC Board lost programming)	PC BOARD SETTINGS LOST Re-insert GTC Card to PC Board Program PCB for proper gas type Set Gas pressures
No Error Code	Nothing Happens When Water is Flowing Through Unit	FLOW OF WATER THROUGH UNIT NOT BEING RECOGNISED Make sure unit is connected to proper power supply and circuit breakers are on Check unit has power by pressing MAX button Make sure power supply inlet fuses are not blown Clean inlet water supply filter, check for blockages or restrictions Ensure you have at least the minimum water flow rate required for ignition Remove and clean water impeller, ensure spinning freely On new installations ensure hot and cold water lines are not crossed Check for bleed over. Close cold water supply valve to water heater. open hot water taps at fixture. If water flows from hot water taps there is a bleed over in the system plumber to rectify

Error Codes

Code	Fault	Cause & Remedy
No Error Code	Unit ignites momentarily when cold water tap is opened.	PLUMBING SYSTEM ISSUE EXISTS Water inlet and outlet connected incorrectly Bleed Over = Hot and cold water pipes are joined somewhere on the property Water bounce = and "air-bubble" exists in a dead leg of the hot water line. Identify Purge complete hot water system, fit non-return valve
No Error Code	No water comes out of tap	UNIT SHUTS OFF WATER - SAFETY SYSTEM ENGAGED Too high inlet water pressure - install 400kpa pressure reducing valve While operating power interrupted - turn power off for 30sec then restart
No Error Code	Fluctuating Water Temperature	WATER STARTS HOT, THEN LOSES TEMPERATURE or FLUCTUATES Check regulator pressure and gas cylinder volume** Check and calculate if installation undersized, remedy Check inlet water supply pressure, clear unit and tap filters If BOREHOLE use, flush with vinegar or de-scaling solution until cleared

**** Regulators should always be checked for low/high output pressure, consistent pressure delivery, regulator creep and oil residue**